

K. Matsuyama et al.
U.S. Serial No. 10/630,470
Page 2 of 8

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended): An image forming apparatus comprising:

a sheet eject mechanism movable between an initial position and a sorting position in a direction orthogonal to a sheet transport direction in sorting processing, and to eject sheets being sorted by copy or by image-forming job in the sorting processing to a receiving tray; and

a control device for ~~regulating~~ determining a delay time required for the sheet eject mechanism moving from the initial position to the sorting position with a sheet held therein to start to return to the initial position after ejecting the sheet to the receiving tray, based on a difference in length between a transport interval that varies according to sizes of sheets being processed and time that it takes the sheet eject mechanism to move back from the sorting position to the initial position such that the sheet eject mechanism completes its return to the initial position within a transport interval, the sheets being transported sequentially to the sheet eject mechanism at the transport interval.

Claim 2 (original): The image forming apparatus according to claim 1, wherein the control device compares the transport interval with a preset reference transport interval, thereby setting a longer delay time than a reference delay time corresponding to the reference transport interval if the transport interval is longer than the reference transport interval, and a shorter delay time than the reference delay time if the transport interval is shorter than the reference transport interval.

Claim 3 (original): The image forming apparatus according to claim 1, wherein the control device determines whether or not a sheet is of a particular size with its transport interval shorter than the reference transport interval, and if the sheet is of the particular size, sets a shorter delay time than the reference delay time corresponding to the reference transport interval.

K. Matsuyama et al.
U.S. Serial No. 10/630,470
Page 3 of 8

Claim 4 (original): The image forming apparatus according to claim 1, wherein the sheet eject mechanism moves with each copy or image-forming job to sort alternately between the initial position and sorting positions arranged on both sides of the initial position in the direction orthogonal to the sheet transport direction.

Claim 5 (currently amended): ~~An~~ The image forming apparatus according to claim 1,
comprising:

~~— a sheet eject mechanism movable between an initial position and a sorting position in a direction orthogonal to a sheet transport direction in sorting processing, and to eject sheets being sorted by copy or by job in the sorting processing to a receiving tray; and~~

a wherein the control device is provided for selectively setting either of a first image-forming speed and a second image-forming speed as an image-forming speed in the sorting processing, the first image-forming speed being used when sorting processing is not performed, and the second image-forming speed being less than the first image-forming speed.

Claim 6 (original): The image forming apparatus according to claim 5, wherein the control device, comparing in sheet sorting processing the transport interval at the first image-forming speed with a preset reference transport interval, sets the first image-forming speed as the image-forming speed in the sorting processing when the sheet transport interval is longer than the preset reference transport interval; and sets the second image-forming speed as the image-forming speed when the sheet transport interval is shorter than the reference transport interval.

Claim 7 (original): The image forming apparatus according to claim 5, wherein the control device determines whether a sheet is of a particular size, the sheet transport interval being shorter than the reference transport interval in the particular size, and sets the second image-forming speed when the sheet is of the particular size.

Claim 8 (original): The image forming apparatus according to claim 5, wherein the control device changes timings at which a sheet is transported to an image forming section.

K. Matsuyama et al.
U.S. Serial No. 10/630,470
Page 4 of 8

Claim 9 (original): The image forming apparatus according to claim 5, wherein the sheet eject mechanism moves with each copy of sheets or each image-forming job to sort alternately between the initial position and sorting positions arranged on both sides of the initial position in the direction orthogonal to the sheet transport direction.

Claim 10 (new): An image forming apparatus comprising:

a sheet eject mechanism movable between an initial position and a sorting position in a direction orthogonal to a sheet transport direction in sorting processing, and to eject sheets being sorted by copy or by image-forming job in the sorting processing to a receiving tray; and

a control device for regulating a delay time required for the sheet eject mechanism moving from the initial position to the sorting position with a sheet held therein to start to return to the initial position after ejecting the sheet to the receiving tray, wherein the control device regulates the delay time based on detected sizes of sheets being processed, the sheets being transported sequentially to the sheet eject mechanism.